ABSTRACT

A hybrid electric vehicle having an energy generation system, an energy storage system and at least one electric motor includes a controller for controlling operation of vehicle systems. The controller determines which of a plurality of component configurations is selected. Based upon this determination, the controller establishes the vehicle components in the selected configuration and connected in the selected component architecture. The controller also generates commands based upon this determination to operate the vehicle in a control method corresponding to the determined component configuration. A method for implementing various component configurations is also disclosed.